



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/599,809

06/21/2000

Matthew J. Kotler

146859.01

8042

69316 7590 10/28/2009

MICROSOFT CORPORATION  
ONE MICROSOFT WAY  
REDMOND, WA 98052

EXAMINER

DESAI, RACHNA SINGH

ART UNIT

PAPER NUMBER

2176

NOTIFICATION DATE

DELIVERY MODE

10/28/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBOUTON@MICROSOFT.COM  
vffiling@microsoft.com  
stevensp@microsoft.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/599,809	<b>Applicant(s)</b> KOTLER ET AL.	
	<b>Examiner</b> RACHNA S. DESAI	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13,41-50,82-92,98-101 and 103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13,41-50,82-92,98-101 and 103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/05/09 and 07/22/09</u> .                                   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is responsive to communications: Amendments and Remarks filed on 07/21/09.
2. Claims 1-13, 41-50, 82-92, 98-101, and 103 are currently pending. Claims 1, 41, 82, 85, 87, 89, 92, and 98 are independent claims. Claims 1, 41, 82, 85, 87, 89, 92, and 98 have been amended.

### ***Information Disclosure Statement***

3. Portions of the information disclosure statement filed 07/22/09 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; **each non-patent literature publication** or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Thus, the references that have been crossed out have not been considered because a copy of the NPL literature publication was not provided.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2176

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claim 1-13, 41-43, 50, 82-92, 98, 101 and 103 are rejected under 35**

**U.S.C. 103(a) as being unpatentable over Laura Acklen & Read Gilgen ("Acklen"),**

***Using Corel WordPerfect 9, 251-284, 424-434, 583-586 (1998), in view of***

***Webopedia Computer Dictionary (hereinafter "Webopedia"), pgs. 1-7 and added***

***supplemental pg. 1 (available at [www.pcwebopedia.com](http://www.pcwebopedia.com)) and Hatakeda et al., US***

***6,057,837, 05/02/2000 (filed 07/15/97) (hereinafter "Hatakeda").***

*Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Hatakeda at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, reference Hatakeda additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).*

*Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.*

**Examiner Note:** The 4 definitions cited from Webopedia are:

"OLE", Last modified on May 16, 1998, pgs 1-3 (*available at* [www.pcwebopedia.com/TERM/O/OLE.html](http://www.pcwebopedia.com/TERM/O/OLE.html)); "OpenDoc", Last modified on September 18, 1997, pgs. 4-6 (*available at* [www.pcwebopedia.com/TERM/O/OpenDoc.html](http://www.pcwebopedia.com/TERM/O/OpenDoc.html)); "Network", Last modified on September 1, 1996, pg. 7 (*available at* [www.pcwebopedia.com/TERM/n/Network.html](http://www.pcwebopedia.com/TERM/n/Network.html)); "Enter Key", Last modified on Sunday, September 01, 1996, supplemental pg. 1 (*available at* [systems.webopedia.com/TERM/E/Enter-key.html](http://systems.webopedia.com/TERM/E/Enter-key.html)).

**Regarding independent claims 1 and 98**, Acklen teaches an architecture comprising:

➤ *a table appearance manager to manage how a table appears in a document* (see heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the way a table appears in a document), *the table having a cell configured to be interpreted by the architecture as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); *and*

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *the selection of the cell, when the cell includes text or a data value, being exhibited by a character-based cursor ready for cell editing* (see Acklen pgs. 261-262 → when a cell is selected, a user can edit text by using keys as

they do with any other text. This includes deleting text from cells or entering data in the cell).

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the document (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).*

➤ *the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)*

➤ *the one or more tables being configured to be displayed without column headers and row headers at other times (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)*

Acklen does not explicitly teach:

➤ *wherein the table appearance manager and the spreadsheet functionality manager are architecturally separate system managers of the architecture.*

However, Webopedia teaches that the OLE (Object Linking and Embedding) standard and the OpenDoc Application Programming Interface (API) are compound document standards/interfaces wherein the independent programs (components → i.e.

spreadsheet manager and word processor table manager) are architecturally separate despite the ability of the separate architectures to work together on a single document (see Webopedia, pgs. 1 and 4).

Since both references are from the same field of endeavor, the express motivational purpose of a more efficient and streamlined integration of independent programs onto a single compound document as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not explicitly disclose, *“the functions comprising determining by the architecture and response to a selection of the cell, whether the cell is word processing based or spreadsheet based and treating an enter key typed into the cell as meaning a return command in the event that the cell is interpreted as word-processing based or as meaning a command to navigate to another cell if interpreted as spreadsheet based”*.

However, Webopedia discloses that the Enter key has a duality of functions: (i) return key, or (ii) moves cursor to the next field (see pg. 1). Furthermore, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Enter key served the function of a “return” key in electronic word processing documents and

served the function of moving a cursor to the next field in electronic spreadsheet documents.

Since both references are from the same field of endeavor, the express motivational purpose of streamlining and making more efficient a key by allowing dual functions on said key as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their



respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claim 2**, Acklen, in view of Webopedia, teach the architecture of claim 1, *wherein the document is a markup document* (see pgs. 583-586: Acklen teaches that an entire document, including tables, can be converted to HTML documents).

**Regarding claim 3**, Acklen, in view of Webopedia, further teach the architecture of claim 1, *wherein the table appearance manager provides a formula edit box to permit entry of a formula into a cell of the table* (see pgs. 425-427 and Fig. 15.22: Acklen teaches a Formula Textbox).

**Regarding claim 4**, Acklen, in view of Webopedia, teach a table manager to create, work, edit, format the way a table appears in a document (see Acklen heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*) and a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc. (see Acklen headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430). This meets the limitation, *a table component to support editing functionality of the table; and a spreadsheet component to receive data and formulas input into the table.*

**Regarding claim 5**, Acklen, in view of Webopedia, further teach a cell table to maintain data values and formulas used in the table (see pgs. 425-427 and Figs. 15.21, 15.22 → table maintains data values and formulas); and a format table to maintain formatting information used in the table (see Acklen pgs. 264-284 → formatting information can be saved when editing the format of the table); the formatting information comprising whether or not the cell is interpreted as primarily word-processing based or as primarily spreadsheet-based (see page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)).

**Regarding claim 6**, Acklen, in view of Webopedia, further teach *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see Acklen pgs. 425-427 and Figs. 15.21, 15.22 → The table maintains data values and formulas); and*

*the recalculation engine being configured to recalculate the formulas following a change to a data value or formula in the cell table (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).*

**Regarding claim 7**, Acklen, in view of Webopedia, further teach *the architecture of claim 1, wherein the spreadsheet functionality manager comprises:*

*a cell table to maintain data values and formulas used in the table (see Acklen pgs. 425-427 and Figs. 15.21, 15.22 → The table maintains data values and formulas);*

*a delay parser to parse input for the cell table as needed (see Acklen pg. 427 – “View Error” → If you incorrectly build a formula, this command will allow you to find out why you got the error and how to fix the problem. It is therefore inherent that the input is parsed in order to determine whether a formula is entered correctly for calculation or in need of correction due to error); and*

*a recalculation engine being configured to recalculate the formulas following a change to a data value or formula in the cell (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).*

**Regarding claims 8-10,** Acklen , in view of Webopedia, further teach *the architecture of claim 1, wherein multiple tables appear in **one or more documents**, and the spreadsheet functionality manager is configured to maintain data and formulas for the multiple tables and track references made from one table to another table, the spreadsheet functionality being further configured to update any data and formulas in the multiple tables that is affected by a change made to one of the tables (see Acklen pgs. 431-434 – “Project”; see also Fig. 15.30 → WordPerfect’s built-in spreadsheet capabilities allows the ability to link (*track references*) between a database table and a document table with formulas. Therefore, changes to one of the tables will automatically update any data and formulas affected by the change).*

**Regarding claim 11**, Acklen, in view of Webopedia, further teach *the architecture of claim 1, wherein multiple tables appear in one or more documents, and wherein:*

*the table appearance manager comprises multiple spreadsheet components so that there is one spreadsheet component for an associated table, each spreadsheet component being configured to capture data and formulas input into the associated table; and the spreadsheet functionality manager comprises multiple grid components so that there is one grid component for an associated table and an associated spreadsheet component, each grid component maintaining the data, the formulas, and formatting used in the associated table (see pgs. 252-284 – “Organizing Information with Tables in WordPerfect” → Acklen teaches a table manager to create, work, edit, format the way a table appears in a document).*

**Regarding claim 12**, Acklen, in view of Webopedia, further teach *the architecture of claim 1, further comprising a document renderer to render the document (see Acklen pgs. 277-284 → WordPerfect allows the adding of realism to computer graphics by adding 3D qualities such as a shadows and variations in color and shade).*

**Regarding claim 13**, Acklen teaches a *table appearance manager and the spreadsheet functionality manager*, but does not explicitly teach that the managers *reside on different computers*. However, Webopedia teaches that functions may reside on different computers in a computer network (see pg. 7). It would have been obvious

at the time the invention was made to a person having ordinary skill in the art to separate a table manager and a spreadsheet manager for the motivational purpose of saving hard drive space on a particular computer.

**Regarding independent claims 41 and 82**, Acklen, in view of Webopedia, teach the architecture with respect to independent claim 1 as discussed above.

Furthermore, Acklen teaches *an architecture comprising:*

➤ *a table appearance manager to manage how a table appears in a document* (see heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the way a table appears in a document);

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *determining, by the architecture and responsive to a selection of spreadsheet cells, whether the spreadsheet cells are word-processing based or spreadsheet based, the selection of the spreadsheet cells, when the spreadsheet cells include text or a data value, being exhibited by a character-based cursor ready for cell editing* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas

allows WordPerfect tables to behave like spreadsheets. See also page 431 –  
Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells. See Acklen pgs. 261-262 → when a cell is selected, a user can edit text by using keys as they do with any other text. This includes deleting text from cells or entering data in the cell).

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in first and second tables in the document* (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).

➤ *the first and second tables being configured to be displayed with column headers and row headers during editing of the first and second tables* (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)

➤ *the first and second tables being configured to be displayed without column headers and row headers at other times* (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)

➤ *first and second tables renderable for display as part of a common document* (see pg. 254 → The Drag to Create a New Table option in the Create Table dialog box enables you to create a second table inside of a first table

(*nested*). After the second table is created, you can work with it just the same as the first table);

- *the functions comprising determining, by the architecture, whether a spreadsheet cells are word-processing based or spreadsheet based; the first table having a first cell configured to be interpreted as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula and the second table having a second cell configured to be interpreted as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); and*

➤ *a first spreadsheet component to receive at least one of data or a first formula entered into a first cell in the first table; a first grid component to hold the data or first formula in association with the first cell of the first table (see Fig.*

15.21 → Please note grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → Spreadsheet manager manages

spreadsheet functions such as formulas, calculations, functions, floating cells, etc.);

➤ *a second spreadsheet component to receive at least a second formula entered into a second cell in the second table, the second formula referencing the first cell in the first table; and a second grid component to hold the second formula in association with the second cell of the second table* (see Fig. 15.21 → notice grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → Spreadsheet manager manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

Acklen does not explicitly teach:

➤ *the table appearance manager and the spreadsheet functionality manager are architecturally separate system managers of the architecture.*

However, Webopedia teaches that the OLE (Object Linking and Embedding) standard and the OpenDoc Application Programming Interface (API) are compound document standards/interfaces wherein the independent programs (components → i.e. spreadsheet manager and word processor table manager) are architecturally separate despite the ability of the separate architectures to work together on a single document (see Webopedia, pgs. 1 and 4).

Since both references are from the same field of endeavor, the express motivational purpose of a more efficient and streamlined integration of independent programs onto a single compound document as disclosed by Webopedia would have



been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of the spreadsheet cell, when the cells include formulas, being exhibited by highlighting the formulas.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *selection of the spreadsheet cell, when the cells include formulas, being exhibited by highlighting the formulas.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claims 42, 83, 84**, please refer to the rationale relied upon to reject claim 41.

**Regarding claim 43**, Acklen, in view of Webopedia, teach the architecture of claim 41, wherein the second spreadsheet component presents a formula edit box to allow entry of the second formula (see Acklen pgs. 425-427 and Fig. 15.22 → The Formula Textbox).

**Regarding claims 85 and 86**, Acklen teaches an architecture comprising:

➤ *a table appearance manager to manage how a table appears in a document* (see heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the way a table appears in a document), *the table having a cell configured to be interpreted by the architecture as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); *and*

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *the selection of the cell, when the cell includes text or a data value, being exhibited by a character-based cursor ready for cell editing* (see Acklen pgs. 261-262 → when a cell is selected, a user can edit text by using keys as they do with any other text. This includes deleting text from cells or entering data in the cell).

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the document* (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).

➤ *the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables* (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)

➤ *the one or more tables being configured to be displayed without column headers and row headers at other times* (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page

425 which depicts a table without row and column headers since the table is not being edited.)

➤ *a table appearance manager and the spreadsheet functionality manager configured for: integrating text and spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality; formatting the text according to a particular format; and formatting cells in the spreadsheet table according to the particular format (see pgs. 425-430: Acklen teaches integrating text and a spreadsheet table. See pg. 255-258 and 274-276 which discuss formatting text in a table. See also pgs. 425-430 which discuss formatting cells in a spreadsheet table.)*

Acklen does not explicitly disclose, *“the functions comprising determining by the architecture and response to a selection of the cell, whether the cell is word processing based or spreadsheet based and treating an enter key typed into the cell as meaning a return command in the event that the cell is interpreted as word-processing based or as meaning a command to navigate to another cell if interpreted as spreadsheet based” or spreadsheet functionality comprising an enter key typed into the cell as meaning a command to navigate to another cell.*

However, Webopedia discloses that the Enter key has a duality of functions: (i) return key, or (ii) moves cursor to the next field (see pg. 1). Furthermore, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Enter key served the function of a “return” key in electronic word processing documents and

served the function of moving a cursor to the next field in electronic spreadsheet documents.

Since both references are from the same field of endeavor, the express motivational purpose of streamlining and making more efficient a key by allowing dual functions on said key as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their

respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claims 87-88,** Acklen teaches an architecture comprising:

➤ *a table appearance manager to manage how a table appears in a document* (see heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the way a table appears in a document), *the table having a cell configured to be interpreted by the architecture as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); *and*

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *the selection of the cell, when the cell includes text or a data value, being exhibited by a character-based cursor ready for cell editing (see Acklen pgs. 261-262 → when a cell is selected, a user can edit text by using keys as they do with any other text. This includes deleting text from cells or entering data in the cell).*

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the document (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).*

➤ *the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)*

➤ *the one or more tables being configured to be displayed without column headers and row headers at other times (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)*

➤ *a table appearance manager and the spreadsheet functionality manager configured for: integrating text and spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality; evaluating the text and the spreadsheet table concurrently for possible spelling and*

*grammatical errors* (see pgs. 425-430: Acklen teaches integrating text and a spreadsheet table. See Chapter 4 (“Using Writing Tools” – spell check, grammar check, find, replace, etc.)).

Acklen does not explicitly disclose, *“the functions comprising determining by the architecture and response to a selection of the cell, whether the cell is word processing based or spreadsheet based and treating an enter key typed into the cell as meaning a return command in the event that the cell is interpreted as word-processing based or as meaning a command to navigate to another cell if interpreted as spreadsheet based” or spreadsheet functionality comprising an enter key typed into the cell as meaning a command to navigate to another cell.*

However, Webopedia discloses that the Enter key has a duality of functions: (i) return key, or (ii) moves cursor to the next field (see pg. 1). Furthermore, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Enter key served the function of a “return” key in electronic word processing documents and served the function of moving a cursor to the next field in electronic spreadsheet documents.

Since both references are from the same field of endeavor, the express motivational purpose of streamlining and making more efficient a key by allowing dual functions on said key as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen



with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claim 89,** Acklen teaches an architecture comprising:

➤ *a table appearance manager to manage how a table appears in a document* (see heading: "Organizing Information with Tables in WordPerfect", pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the

way a table appears in a document), *the table having a cell configured to be interpreted by the architecture as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); *and*

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *the selection of the cell, when the cell includes text or a data value, being exhibited by a character-based cursor ready for cell editing* (see Acklen pgs. 261-262 → when a cell is selected, a user can edit text by using keys as they do with any other text. This includes deleting text from cells or entering data in the cell).

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the*

*document* (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).

➤ *the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables* (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)

➤ *the one or more tables being configured to be displayed without column headers and row headers at other times* (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)

➤ *a table appearance manager and the spreadsheet functionality manager configured for: integrating text and spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality; enabling selection of a control function to modify or evaluate an aspect of the document; and applying the control function across both the text and the spreadsheet table* (see pgs. 425-430: Acklen teaches integrating text and a spreadsheet table. See pgs. 275-276 which disclose formatting cells of the document. Further, Acklen (i.e., WordPerfect) as shown in the Acklen Table of Contents: Part I – Chapters 3 (“Basic Formatting”) and 4 (“Using Writing Tools” – spell check, grammar check, find, replace, etc.) and Part IV (“Working with Graphics”).)

Acklen does not explicitly disclose, *“the functions comprising determining by the architecture and response to a selection of the cell, whether the cell is word processing based or spreadsheet based and treating an enter key typed into the cell as meaning a return command in the event that the cell is interpreted as word-processing based or as meaning a command to navigate to another cell if interpreted as spreadsheet based”* or *spreadsheet functionality comprising an enter key typed into the cell as meaning a command to navigate to another cell.*

However, Webopedia discloses that the Enter key has a duality of functions: (i) return key, or (ii) moves cursor to the next field (see pg. 1). Furthermore, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Enter key served the function of a “return” key in electronic word processing documents and served the function of moving a cursor to the next field in electronic spreadsheet documents.

Since both references are from the same field of endeavor, the express motivational purpose of streamlining and making more efficient a key by allowing dual functions on said key as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claim 90**, Acklen teaches a user can format cells in the document. See pages 275-276. See also the Acklen Table of Contents: Part I – Chapters 3 (“Basic Formatting”) and 4 (“Using Writing Tools” – spell check, grammar check, find, replace, etc.) and Part IV (“Working with Graphics”).)

**Regarding claim 91**, Acklen teaches a user can format cells (i.e. apply a text feature) in the document. See pages 275-276. See also the Acklen Table of Contents:

Part I – Chapters 3 (“Basic Formatting”) and 4 (“Using Writing Tools” – spell check, grammar check, find, replace, etc.) and Part IV (“Working with Graphics”).

**Regarding claim 92**, Acklen teaches an architecture comprising:

➤ *a table appearance manager to manage how a table appears in a document* (see heading: “Organizing Information with Tables in WordPerfect”, pg. 252 *et seq.*: Acklen teaches a table manager to create, work, edit, format the way a table appears in a document), *the table having a cell configured to be interpreted by the architecture as word-processing based when the cell includes text or as spreadsheet-based when the cell includes one or more of a data value or formula* (see pages 424-426 – Acklen discloses tables containing imported spreadsheet which contain formulas. Acklen teaches using formulas allows WordPerfect tables to behave like spreadsheets. See also page 431 – Second heading: WordPerfect interprets cells with text in it as word-processing based, and thus ignores these cells in processing spreadsheet-based cells (i.e., formula, numeric floating cells)); *and*

➤ *a spreadsheet functionality manager to manage spreadsheet functions for the table* (see headings “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables”, pgs. 425-430: Acklen teaches a spreadsheet functionality manager that manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

➤ *the selection of the cell, when the cell includes text or a data value, being exhibited by a character-based cursor ready for cell editing* (see Acklen

pgs. 261-262 → when a cell is selected, a user can edit text by using keys as they do with any other text. This includes deleting text from cells or entering data in the cell).

➤ *a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the document (see Acklen pg. 427 → The tables can be set to automatically recalculate when you make changes).*

➤ *the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar.)*

➤ *the one or more tables being configured to be displayed without column headers and row headers at other times (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)*

➤ *a table appearance manager and the spreadsheet functionality manager configured for: integrating text and spreadsheet table within a common document, the spreadsheet table supporting spreadsheet functionality; creating a second spreadsheet table by cutting or copying all or part of the first spreadsheet table and pasting all or part of the first spreadsheet table; and updating any references to cells in the first spreadsheet table or the second spreadsheet table*

*to reflect the newly created second spreadsheet table (see pgs. 425-430: Acklen teaches integrating text and a spreadsheet table. Acklen (i.e., WordPerfect) as shown in the Acklen Table of Contents: Part I – Chapters 3 (“Basic Formatting”) and 4 (“Using Writing Tools” – spell check, grammar check, find, replace, etc.) and Part IV (“Working with Graphics”). See Acklen page 263 which teaches cut, copy, and past features for cutting and pasting a table or portion of the table to create another table structure.)*

*Acklen does not explicitly disclose, “the functions comprising determining by the architecture and response to a selection of the cell, whether the cell is word processing based or spreadsheet based and treating an enter key typed into the cell as meaning a return command in the event that the cell is interpreted as word-processing based or as meaning a command to navigate to another cell if interpreted as spreadsheet based” or spreadsheet functionality comprising an enter key typed into the cell as meaning a command to navigate to another cell.*

However, Webopedia discloses that the Enter key has a duality of functions: (i) return key, or (ii) moves cursor to the next field (see pg. 1). Furthermore, it was commonly known to those of ordinary skill in the art and would have been obvious at the time the invention was made to a person having ordinary skill in the art that the Enter key served the function of a “return” key in electronic word processing documents and served the function of moving a cursor to the next field in electronic spreadsheet documents.



Since both references are from the same field of endeavor, the express motivational purpose of streamlining and making more efficient a key by allowing dual functions on said key as disclosed by Webopedia would have been recognized in the pertinent art of Acklen. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen with the teachings of Webopedia to include separate architectures for the table appearance manager and the spreadsheet functionality manager.

Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.

However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula.*

It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

**Regarding claim 103**, Acklen teaches *the architecture comprises a complementary pair of spreadsheet and grid objects for the table, the spreadsheet object facilitating entry of content into the table and the grid object holding the content for the table*. See Fig. 15.21 → Please note grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → Spreadsheet manager manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.);

**Regarding claims 50 and 101**, Acklen, in view of Webopedia, further teach a free floating field renderable in the document but separately from the first and second tables; a third spreadsheet component to receive a third formula entered into the free floating field (see Acklen pgs. 429-430); and a third grid component to hold the third formula table (see Fig. 15.21 → Notice grid component and cells which can hold data and formulas; see also pgs. 425-430 - “Linking Spreadsheet Data” and “Using Spreadsheet Formulas in Tables” → Spreadsheet manager manages spreadsheet functions such as formulas, calculations, functions, floating cells, etc.).

**6. Claims 44-49 and 99-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laura Acklen & Read Gilgen (“Acklen”), *Using Corel WordPerfect 9*, 251-284, 424-434, 583-586 (1998), in view of *Webopedia Computer Dictionary* (hereinafter “Webopedia”), pgs. 1-7 and added supplemental pg. 1 (available at [www.pcwebopedia.com](http://www.pcwebopedia.com)) and Hatakeda et al., US 6,057,837,**

**05/02/2000 (filed 07/15/97) (hereinafter "Hatakeda"), as applied to claims 41 and 98 above, and further in view of Redpath, US 5,630,126, 05/1997.**

*Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Hatakeda at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, reference Hatakeda additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).*

*Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.*

**Regarding claim 44**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include

reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 45**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express

motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 46**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising **a recalculation engine** wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 47**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 48**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the

architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 49**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to

the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 99**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.



However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

**Regarding claim 100**, Acklen, in view of Webopedia and Hatakeda, teach the architecture of claim 41 and 42 as discussed above, but does not specifically teach the architecture wherein the second spreadsheet component facilitates reference editing to the first cell in the first table comprising a recalculation engine wherein the first and second tables are updated to reflect a result produced by the recalculation engine.

However, Redpath teaches a plurality of math cells located within a common compound document, all linked together (i.e. *dependencies*) so that related math parts

Art Unit: 2176

are evaluated and updated upon user input. In response to user input, each math cell in the first set automatically displays the results from the reevaluation (i.e. *recalculation*) of its computational functions (i.e. *formulas*) (see col. 2, lines 38-40, 61-63; col. 3, lines 60 *et seq.*).

Since Acklen, in view of Webopedia, and Redpath are from the same field of endeavor, the purposes disclosed by Redpath would have been recognized in the pertinent art of Acklen, in view of Webopedia. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Acklen, in view of Webopedia, with the teachings of Redpath to include reference editing between tables in a common compound document for the express motivational purpose of linking calculations between cells and thus, automatically recalculating and updating functions upon user input for both tables.

### ***Response to Arguments***

7. Applicant's amendments and remarks with respect to claims filed on 07/22/09 have been fully considered. Applicant amended claims 1, 3, 6, 7, 41, 43, 46, 82, 85, 87, 89, 92, 98, and 103.

Applicant's amendments have been addressed above. Applicant generally argues with respect to independent claims 1, 41, 82, 85, 87, 89, 92, and 98 that the newly cited features reciting *the selection of the cell, when the cell includes a formula, being exhibited by highlighting the formula* is not taught by the references. Applicant's

arguments with respect to claims 1, 41, 82, 85, 87, 89, 92, and 98 have been considered but are moot in view of the new ground(s) of rejection.

Specifically, Examiner agrees Acklen does not expressly teach the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula. However, Hatakeda discloses highlighting a formula when a cell including a formula is selected as in figure 1b which depicts a highlighted formula upon selection of cell B6 which meets the limitation, *the selection of a cell, when the cell includes a formula, being exhibited by highlighting the formula*. It would have been obvious to a person of ordinary skill in the art at the time of the invention to have incorporated Hatakeda's highlighting of a formula in a formula cell within the system of Acklen since the highlighting of the formula allowed for easy editing of the formula since the user would not need to navigate to the formula bar of the spreadsheet. Further, such a combination would have been obvious since all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.

Applicant also argues the recalculation engine as amended is not taught by the references.

Examiner disagrees in light of the rejections above.

Specifically, Acklen teaches a recalculation engine to provide automatic universal recalculation in response to a change to a data value or a formula in one or more tables in the document (see Acklen pg. 427 → The tables can be set to automatically

recalculate when you make changes). Acklen further teaches the one or more tables being configured to be displayed with column headers and row headers during editing of the one or more tables (see Acklen pg. 426 and figures 15.22-15.23 where row and column indicators are present when using a formula toolbar). Acklen discloses *the one or more tables being configured to be displayed without column headers and row headers at other times* (see Acklen figures on pages 272-273 which depicts a table without row and column headers. See the figure on page 425 which depicts a table without row and column headers since the table is not being edited.)

In view of the comments above, the rejections are maintained.

### **Conclusion**

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RACHNA S. DESAI whose telephone number is (571)272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rachna S Desai/  
Primary Examiner, Art Unit 2176  
10/22/09